

REMARKS

The Office Action dated March 8, 2004, has been received and carefully considered. In this response, claims 1, 4, 7, 8, 9, 11, 12, 15, 16, 17, 19, 22 and 23 have been amended and claims 5, 6, 13, 14, 20 and 21 have been canceled. Support for the amendments to the claims may be found in the specification and figures as originally filed. Entry of the added claims therefore is respectfully requested. Reconsideration of the outstanding rejections in the present application is further respectfully requested based on the following remarks.

Indication of Acceptability of Previously Submitted Replacement Drawings

A replacement sheet for Figure 1 was filed with Applicants' previous response on January 7, 2004. The present Office Action provides no indication whether this replacement drawing was accepted by the Examiner. Applicants therefore respectfully request the Examiner provide such an indication.

Anticipation Rejection of Claims 1-3, 9-11, 17 and 18

At page 2 of the Office Action, claims 1-3, 9-11, 17 and 18 were rejected under 35 U.S.C. § 102(b) as being anticipated by Ross (U.S. Patent No. 5,909,594). Claims 1, 9 and 17, from which claims 2, 3, 10, 11, and 18 respectively depend, have been amended, thereby obviating this rejection.

Claims 1 and 9 have been amended to recite the additional limitations of a time slice timer capable of producing a current time slice value and an arbitration circuit capable of determining a fixed time slice range associated with a first bus device and comparing said fixed time slice range with said current time slice value. Claim 17 has been amended to recite similar limitations. Support for the amendments to claims 1, 9 and 17 may be found, *inter alia*, in claims 5, 6, 13, 14, 20 and 21 as originally filed.

As the Examiner admits at page 6 of the Office Action, Ross fails to disclose at least these limitations and therefore fails to disclose or suggest each and every limitation presently recited in claims 1, 9 and 17. As such, Ross fails to disclose or suggest each and every limitation presently recited in claims 2, 3, 10, 11 and 18 at least by virtue of their dependency on one of

independent claims 1, 9 and 17. Moreover, these claims recite additional features that are not disclosed or even suggested by the cited references taken either alone or in combination.

Accordingly, it is respectfully submitted that the anticipation rejection of claims 1-3, 9-11, 17 and 18 is improper at this time and the withdrawal of this rejection therefore is respectfully requested.

Obviousness Rejection of Claims 4, 12 and 19

At page 5 of the Office Action, claims 4, 12 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ross in view of Simpson (U.S. Patent No. 6,185,629). This rejection is hereby respectively traversed with amendment.

As noted above and as admitted by the Examiner, Ross fails to teach at least the limitations of a time slice timer capable of producing a current time slice value and an arbitration circuit capable of determining a fixed time slice range associated with a first bus device and comparing said fixed time slice range with said current time slice value as presently recited by claims 1, 9 and 17, from which claims 4, 12 and 19 depend, respectively. Simpson also fails to disclose or suggest at least these limitations. Accordingly, the combination of Ross and Simpson fails to disclose each and every limitation recited in claims 1, 9, and 17 and therefore fails to disclose each and every limitation recited in claims 4, 12 and 19 at least by virtue of their dependency from one of independent claims 1, 9 and 17. Claims 4, 12 and 19 also recite additional features that are not disclosed or even suggested by the cited references taken either alone or in combination.

Accordingly, it is respectfully submitted that the obviousness rejection of claims 4, 12 and 19 is improper at this time and the withdrawal of this rejection therefore is respectfully requested.

Obviousness Rejection of Claims 5-8, 13-16 and 20-23

At page 5 of the Office Action, claims 5-8, 13-16 and 20-23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ross in view of Azevedo (U.S. Patent No. 4,969,120). This rejection is hereby respectively traversed.

Claims 1 and 9 have been amended to recite the additional limitations of a time slice timer capable of producing a current time slice value and an arbitration circuit capable of determining a fixed time slice range associated with a first bus device and comparing said fixed time slice range with said current time slice value. Claim 17 has been amended to recite similar additional limitations. With respect to these limitations, the Examiner alleges that Azevedo discloses these limitations and further alleges that it would have been obvious to one of ordinary skill in the art "to employ the use of time slotted arbitration, as Azevedo teaches, in the system of Ross so as to insure that certain high priority devices are fairly guaranteed resource access over non-high-priority devices." Office Action, pp. 6-7.

In proposing this combination, the Examiner asserts that the counter 25 of Azevedo is capable of producing a current time slice value and that the arbitration circuit of Azevedo is capable of determining a fixed time slice range associated with a first bus device and comparing the fixed time slice range with the current time slice value, and wherein the arbitration circuit of Azebedo, in response to a determination that the current time slice value is within the fixed time slice range, causes servicing of a first request prior to the service of a second request. Office Action, p. 6. The Applicants respectfully disagree with the Examiner's characterization of the teachings of Azevedo. Referring to the passage of Azevedo cited by the Examiner (i.e., Azevedo, col. 2, lines 3-20 and col. 3, line 16 – col. 4, line 40), no disclosure or suggestion of the production of a current time slice value or the comparison of such a current time slice value to a fixed time slice range associated with a bus device may be discerned. As taught by Azevedo, the "[c]ounter 25 counts the time slots of data bus 10; in the instant illustration, counter 25 is a modulo-2 counter (*a trigger*). Counter 25 *supplies the time slot indications* to high priority access circuits 26 for effecting the high priority access arbitration." Azevedo, col. 4, lines 19-24 (emphasis added). Thus, rather than providing a current time slice value, the counter 25 of Azevedo provides indications of the occurrences of time slots on the data bus 10. Likewise, Azevedo contains no disclosure related to the association of a fixed time slice range with a bus device or the comparison of a current time slice value to such a fixed time slice range. Instead, Azevedo proposes the use of a series of logic equations (e.g., equation 1, col. 4, and equation 2, col. 5) for the purposes of a modified round robin arbitration scheme for devices competing for a bus. See, e.g., Azevedo, col. 5, line 37 – col. 6, line 59. The modified round robin arbitration scheme taught by Azebedo does not disclose or suggest the comparison of a

current time slice value with a fixed time slice range associated with a bus device. Accordingly, Applicants respectfully submit that the combination of Ross and Azevedo fail to disclose each and every limitation recited in claims 1, 9, and 17 and therefore fail to disclose each and every limitation recited in claims 7, 8, 15, 16, 22 and 23 at least by virtue of their dependency from one of independent claims 1, 19 and 17. These claims also recite additional features that are not disclosed or even suggested by the cited references taken either alone or in combination.

Accordingly, it is respectfully submitted that the obviousness rejection of claims 5-8, 13-16 and 20-23 is improper at this time and the withdrawal of this rejection therefore is respectfully requested.

Conclusion

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

The Applicants believe no additional fees are due, but if the Commissioner believes additional fees are due, the Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 01-0365.

Respectfully submitted,

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Date


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